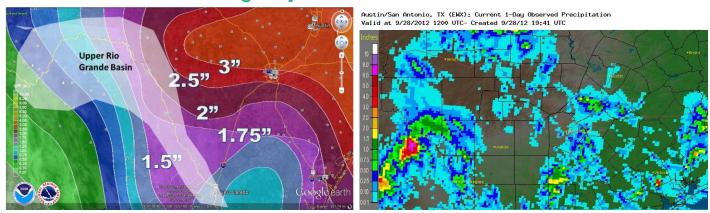
# **Additional Fcst. Rain Through Sep. 30th**



# A Little More Help for the Rio Grande? This Time, Tropical Moisture from Eastern Pacific Storms Involved

### Overview

Early on September 28<sup>th</sup>, the combination of tropical moisture plumes from eastern Pacific tropical cyclones Miriam and Norman produced a pocket of very heavy rainfall, estimated at 4 to 8 inches (above right, red and purple area) across and near part of the headwaters of the Rio Grande Basin (watershed) in northern Mexico to the west of Del Rio, Texas. Additional heavy rainfall was expected overnight of the 28<sup>th</sup> into the 29<sup>th</sup> before precipitation moves quickly across south and central Texas (above left).

# **Impact on the Basin**

The good news? The nature of the rainfall (tropical in source) *should* flow from northern Mexican tributaries, as well as tributaries in west Texas, into the Rio Grande at and below Amistad International Reservoir. How much water reaches each reservoir is dependent on flow, absorption, and any activities on the Mexican side of the border. There is a possibility that the water could temporarily stanch the fall of water at Amistad, which had edged below 49 percent of conservation as of September 28<sup>th</sup> while Falcon International Reservoir, aided by additional releases at Amistad, had edged over 21 percent of capacity. How much impact will not be known until well after the rains have ended and runoff reaches either reservoir.

The not-so-good news? The welcome rain will quickly be replaced by a dry weather pattern, not unusual for early October (below, left). Any relief may be temporary, and we can only hope for some relief during the late fall and winter of 2012/2013 should an El Niño-induced subtropical jet help produce more frequent rain events across south Texas and northern Mexico. With the 2012 Texas Hurricane Season effectively over, such rains may be the Valley's only hope before the late spring and summer of 2013. There are no guarantees, as other factors, like so many puzzle pieces, need to combine to create the weather patterns, wet or dry, of winter.

#### **Impact for Valley Residents**

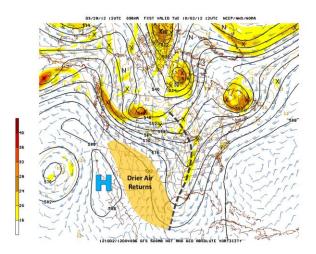
Rainfall on Saturday, September 29<sup>th</sup>, was expected to fall everywhere. Unfortunately, heaviest rainfall was expected to be local where the strongest cells develop. In general, one quarter to one inch of rain was a good bet overall, with pockets of 1 to 2 inches and the possibility of 3 inches in a few spots. Primary impacts are expected to be nuisance urban flooding, occasional to frequent lightning along a developing squall line, and wind gusts potentially to 40 mph. Behind the line, drier weather filters into the region for the 30<sup>th</sup>.



### **How Now, Drought?**

Prior to the last of September rainfall, Rio Grande Valley drought had worsened. Exceptional Drought – the highest of the scale – had spread into northern Hidalgo County, with Extreme Drought covering everywhere else except a corner of the Upper Rio Grande Valley near the Starr/Zapata County line along the river (below, right). Hopeful rains had started on September 28<sup>th</sup> across the Lower Valley, but the potential for widespread heavy rainfall through the 29<sup>th</sup> had diminished, and dry air was expected to return to the region to close September and begin October. Rainfall deficits remained in the 1 to 3 inch range even after an estimated 1 to more than 2 inches fell along and near the Lower Valley coast of Cameron and Willacy County on the 28<sup>th</sup>. Locally heavy rainfall on September 29<sup>th</sup> at one or more observing stations may bring levels close to the long term monthly average, but it is more likely that most areas will have total rainfall at 50 percent or less of the expected value for September.

October's start (below, left – forecast for October 2<sup>nd</sup> 2012) begins dry.



# **Drought Monitor September 25 2012**

